FEDERALLY ENFORCEABLE DISTRICT-ORIGIN OPERATING PERMIT – TYPE III APPLICATION

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FEDOOP Application –Type III

I. Introduction

A Synthetic Minor Source or Conditional Major Source is a plant that has chosen to reduce its "potential to emit" to Minor Source levels from Major Source levels. Reductions in a plant's "potential to emit" are obtained by adopting federally enforceable emission or operational limits. These limits can be incorporated as enforceable conditions in the plant's Air Permit. The enclosed application forms must be completed and submitted to the District in order for a Major Source to obtain these enforceable conditions and become a Synthetic Minor or Conditional Major Source.

Major Sources will be subject to extensive permitting and monitoring requirements under Title V of the Clean Air Act. Synthetic Minor or Conditional Major Sources are either exempt from Title V requirements or are deferred from coverage under the program for five (5) years from the date of EPA's approval of the District's Title V program. It is advantageous for a plant that has the "potential to emit" over Major Source levels, i.e. a Major Source, but whose actual emissions are below these levels, to become a Synthetic Minor or Conditional Major Source and thereby gain exemption or deferment from Title V requirements.

This package should provide all the necessary instructions and information for a Major Source to become a Synthetic Minor or Conditional Major Source.

II. Procedure to become a Synthetic Minor or Conditional Major Source

The procedure an applicant needs to follow to determine if their plant can become a Synthetic Minor or Conditional Major Source is outlined below:

A. Perform an emissions inventory of the plant.

A company should identify and quantify emissions of all regulated air pollutants from all activities. This inventory should be performed carefully and methodically in order to obtain as accurate an estimate as possible of the air pollutant emissions from the plant.

B. Calculate the plant's "Potential to Emit" regulated air pollutants

Potential to emit means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is federally enforceable. *Potential to emit is based on maximum capacity and year-round continuous operation.* Federal enforceability refers to limitations and conditions which are enforceable by the EPA under the Clean Air Act. Potential emissions of the same pollutants from different processes are added together to obtain the plant-wide "potential emissions" for that pollutant. (See examples in Section III E, Page 5.)

C. Determine the plant's Classification

A plant is classified as a Major Source or a Minor Source of air pollution, based on its "potential to emit" air pollutants. A Major Source is defined as follows:

Major Source: means any stationary source (or group of sources located on adjacent or contiguous property, under common control of the same person, or persons under common control) and described as follows:

1) Emits or has the potential to emit one hundred (100) tons per year or more of any regulated air pollutant.
2) Emits or has the potential to emit ten (10) tons per year or more of any hazardous air pollutant (HAP) which has been listed pursuant to Section 112(b) of the Act or twenty-five (25) tons per year or more of any combination of such hazardous air pollutants.

A plant may be classified as a major or minor source under this criteria after calculating its potential to emit. Permitting requirements vary for facilities depending on their Major or Minor status as follows:

I) *Minor Sources* - Sources that do not meet the Major Source criteria above are minor sources. If a plant is a minor source, it will not be subject to requirements under the Title V permitting program if it is not subject to NSPS or NESHAP requirements. If the facility is subject to NSPS or NESHAP regulations, and is a minor source, it will be either deferred initially for five (5) years or entirely from coverage under Title V, depending on EPA's future determination. Do not submit this application if you determine your facility to be a minor source. However, please keep records of your potential to emit calculations in order to verify your status in the future.

ii) *Major Sources* - If a plant is a Major Source, it has the option of remaining a Major Source or becoming a Synthetic Minor or Conditional Major Source. If a plant decides to remain a Major Source then it will be subject to the permitting requirements of Title V of the Clean Air Act. Do not submit this application if your facility is a Major Source and decides not to become a Synthetic Minor or Conditional Major Source.

D. Becoming a Synthetic Minor or Conditional Major Source.

Adopting federally enforceable limits into the Air Quality Permit

Major Sources can adopt federally enforceable permit limits to reduce their potential emissions of air pollutants below Major Source levels. These limits should reduce the potential emissions of all pollutants as follows: hazardous air pollutant emissions shall be reduced to less than ten (10) tons per year alone, or twenty-five (25) tons per year in any combination; emissions of all other individual pollutants shall be reduced to less than one hundred (100) tons per year.

To obtain these federally enforceable limits, a source must complete this application form. Essentially, a source determines what the reductions in potential emissions need to be and what limitations need to be adopted in order to achieve these reductions in potential emissions. The plant then describes these limitations in the accompanying application form. The District will then review, and if appropriate, incorporate these limitations as conditions in the company's Air Permit. Other conditions such as monitoring, testing, recordkeeping, and notification requirements will be added to ensure that the limitations are federally enforceable. In filling out this Application Form, you will have the option of suggesting a monitoring strategy. The suggested monitoring strategy will also be reviewed and, if

appropriate, added as conditions in the Air Permit.

III. Adopting federally enforceable limits into the Air Permit

A. Terminology

In order to properly follow the procedure for determining federally enforceable permit limits, the following terms need to be defined and well understood:

Emission Rate: a weight measure of the amount of a pollutant emitted per unit time or per amount of product produced, raw material processed, or fuel combusted. The following are some examples of emission rates: lbs formaldehyde/hour; lbs VOC/day; tons SO_2/month; tons VOC/year; lbs NO_x/ft^3 natural gas; lbs PM/MMBtu; lbs SO_2/gal fuel oil (derived from a % Sulfur content in a fuel); an emission rate derived from a grain/dscf standard; and lbs VOC/gallon coating. Emission rates for different processes can be obtained from: federal or state regulations, derived from emission factors; material balance calculations; or emissions test data. For the purposes of this application, emission rates include emission factors as part of their definition.

There are several different types of emission rates:

- *allowable emission rate*: emission rate originating from federal or state regulations.
- *maximum hourly uncontrolled emission rate*: the maximum emission rate from a process expressed in pounds of a pollutant per hour without taking the use of air pollution control equipment into consideration. This emission rate is determined from emission test data, emission factors, material balance calculations, or other calculations.
- *actual emission rate*: an emission rate obtained from emissions test data, material balance, emission factors, or other means that provide a measure of the emission rate from a process at normal operating levels with control equipment reductions taken into consideration. Actual emission rates cannot be used to calculate potential emissions unless they are equal to the maximum hourly uncontrolled emission rates.

Operating Level: a measure of the amount of product produced, raw material processed, or fuel combusted per unit time at the maximum operating capacity of the equipment. Some examples of operating levels are as follows: ft^3 natural gas/year; MMBtu/hour; gallons fuel oil/month; tons logs/hour. The operating level is specific to the operation of the process. For a certain pollutant, by multiplying the process emission factor (in pounds per unit produced, processed, or combusted) with the appropriate operating level, an emission rate for the pollutant in lbs per unit time from that process can be obtained.

Operating Time: term used to designate the maximum number of hours, days, weeks, months, or other time periods a process operates during an entire year. It is expressed in such units as: hours/year; days/year; and months/year. The operating time is not needed for calculating potential to emit if the emission rate is already expressed in a time period of one year. Unless otherwise limited by federally enforceable limits, the maximum number of hours per year is eight thousand seven hundred sixty (8760).

Permit Emission Limit: for the purposes of this application, this is a limit originating from federally enforceable permit conditions that limit the emissions of a process to lower levels. It is adopted by a facility into its Air Permit to reduce the potential emissions from a particular process. Permit emission limits are expressed in the same units as emission rates described above. It is important to understand the distinction between a process's allowable emission rate, its maximum hourly uncontrolled emission rate, and its permit emission limit. A permit emission limit is a reduced emission rate imposed on the operation of a process by the adoption of federally enforceable permit conditions into the facility's Air Permit. The permit emission limit is lower than the allowable District/federal rule or the maximum hourly uncontrolled emission rates of a process.

Operational Limit: a limit on the operation of a process imposed by the adoption of federally enforceable permit limits in an Air Permit.

B. Types of Limits

Limits adopted to reduce a plant's "potential to emit" are of two different types as listed below:

Emission Limits - restrictions on the amount of a pollutant which may be emitted from a process, expressed in mass per unit time or per amount of product produced, raw material processed, or fuel combusted (eg. lbs/hr, lbs/MMBtu, lbs/lb product, . . .)

Operational Limits - these include limits on the *operating level* or the *operating time* of a process, as well as emission reductions due to the operation of control equipment. Such limits include:

- restrictions on the amount of product which can be manufactured or otherwise produced by an emissions unit or process.
- restrictions on the raw material input to a process.
- restrictions on the manner in which a process is operated, including type or amount of material combusted, stored, or processed.
- restrictions on the type and/or quantity of a fuel combusted.
- conditions which specify that the source must install and maintain air pollution control devices that operate at a specified emission rate or efficiency.
- restrictions on the number of hours a facility can operate.

C. Determining the Limits to Use

Your company must determine which combination of emission limits or operational limits it must incorporate into its Air Permit to reduce its potential emissions for all regulated air pollutants to below Major Source thresholds. In order to do this, the company must first determine for which air pollutants and by what amounts, in tons per year, it is over the Major Source thresholds. The plant must then develop and adopt limits to reduce the potential emissions stemming from the operation of one or more processes responsible for emitting the pollutants that make the plant a Major Source.

D. Requirements for Determining Limits

When determining what limits to include in a permit (either emission limits or operational limits) the plant must meet the following requirements:

1) *Limits must be practically enforceable*

For emission limits to be practically enforceable, the emissions from the process must be monitored for compliance either directly or indirectly. Direct methods of monitoring emissions include the installation of continuous emission monitoring (CEM) systems and the performance of periodic stack testing. Indirect methods for monitoring compliance consist of monitoring surrogate parameters whose values correlate with the emissions from the process. One example of this is the monitoring of an incinerator's chamber temperatures to give an indication of incinerator performance.

Operational limits will also require monitoring and recordkeeping in order to be practically enforceable. Monitoring of operational limits will involve such strategies as the maintenance of logs in which such information as hours of operation, amount and type of raw material or product processed or manufactured, and process operating parameters, such as temperature, is recorded periodically.

2) *Time periods for operational limits shall be no longer than one month or shall be expressed as a rolling limit*

In addition to monitoring requirements, for limits to be practically enforceable the time over which they extend should be as short a term as possible. As a general rule, the time over which operational limits extend shall not exceed one month. This allows the District to establish an initial violation in a reasonable amount of time.

There are times, however, when it is acceptable to use limitations which exceed a one month basis. Longer limits should be used only for sources with significant monthly variation in operation, such as processes with seasonal variations in production. These longer limits would be appropriate only if the limit used is a rolling limit. Rolling limits are limits with a time period expresses as a number of consecutive months, for example one hundred (100) tons of PM per twelve (12) consecutive months. The rolling limit may not exceed an annual limit rolled on a monthly basis. Rolling limits could be used as well for sources which shut down or curtail operation during part of a year on a regular seasonal cycle. Under no circumstances would an operational limit expressed on a calendar year annual basis (for example: tons/year) be considered capable of legally restricting potential to emit. Note: Sources subject to District Regulation 1.05 shall comply with Section 4.1.

E. <u>Examples</u>

1) Boiler burning #2 fuel oil:

a. Limit on sulfur content of fuel - 0.5%
b. Limit on amount of fuel burned - 233,000 gal/month

Results in SO_2 potential emissions under 100 tpy when using the emission factor for SO_2 emissions from distillate fuel combustion from AP-42 of 142 (%Sulfur) lbs SO_2/1000 gallons of #2 fuel oil.

2) Coating process using VOC containing paints:

a. Limit on maximum VOC content of coatings used: 3.0 lb VOC/gal coating

b. Limit on amount of coating used: 2,500 gal/month

Results in VOC potential emissions under 100 tpy.

3) Process with an incinerator controlling hazardous air pollutant (HAP) emissions:

a. Efficiency requirement on the incinerator: 90%
b. Maximum hourly uncontrolled emission rate from process: 20 lb/hr
c. Parameter monitoring requirement which supports incinerator efficiency: temperature in incinerator chamber must be over 1500°F.

Results in HAP potential emissions less than 10 tpy for 8760 hours per year operation. An additional limitation could also have been added to limit the hours operated per year.

4) Process with baghouse controlling particulate matter emissions:

a. Reduced permit emission limit: 9 lb/hr
b. Allowable emission rate from process: 30 lb/hr
c. Requirement to conduct periodic compliance tests and to verify the baghouse performance through monitoring operational parameters and through weekly inspections

Results in PM potential emissions less than 100 tpy. In this case the allowable emissions from the process would have put the process at over the 100 tpy threshold. With a lower limit in place (9 lb/hr) and the monitoring and testing requirements, the facility falls outside Major Source status (if this process is the only source of particulate matter emissions).

5) Process emitting formaldehyde (HAP):

a. Permit emission limit: 3 lb formaldehyde/hour
b. Limit on Hours of Operation: 410 hours/month

Results in formaldehyde (HAP) emissions less than 10 tpy.

IV. Filling out the Application

Complete the enclosed application only if your company wants to become a Synthetic Minor or Conditional Major Source. Instructions for completing this application is enclosed. Return the complete application to:

Air Pollution Control District of Jefferson County
850 Barret Avenue, Suite 205
Louisville, Kentucky 40204-1745

Instructions for Completing the Federally Enforceable District Origin Operating Permit (FEDOOP - Type III) Application

Section 1 - General Information

If there is additional information that will not fit on a form, please declare the information on additional sheet(s) and attach it to the back of the original.

1. Provide the full business name of corporation, company, society, firm, partner-ship, individual or political subdivision of the state submitting the application.

2. If the plant has an additional or different name from the company, include that name here. This may include descriptive names for the plant.

3. Physical site of facility (Street address at which the plant is located; this cannot be a P.O. box).

4. Contact A must be someone at the plant site who will assist on inspections, provide general information about the plant processes (such as plant manager, process engineer, etc.)

5 - 7. Contacts B, C, and D are additional company contacts such as environmental engineer, company owner, any other contact that the company wants to use.

8 - 10. Mailing addresses 1, 2, and 3 allow for correspondence to be mailed to the appropriate location. Address 1 must be the plant's mailing address. Addresses 2 and 3 may be any other company office (regional headquarters, main office, etc.)

11. Standard Industrial Classification Code is a 4-digit code developed for use in the classification of establishments by type of activity in which they are engaged and intended to cover the entire field of economic activities.

12. Using the contact letters and the mailing address numbers, indicate to whom and where mail should be sent. (Example: Permit application may go to Contact A at Address 1). Note: Enter only one contact/address code per correspondence type.

13. List all current air permits and effective dates. Indicate which permits you are requesting permit limitations by entering the letters "RPL" after the permit number (i.e., 110-93 RPL).

14. "Responsible official" means the designated representative for any purposes under District Regulation 2.16, i.e., plant manager or a corporate official.

15. Indicate the type of air pollutants for which limits on the potential to emit are requested.

Section 2 - Proposed Limits in the Air Permit

Complete this section **only** for each process with existing permit limits that need to be made federally enforceable.

2a. List the current air permit number(s).

2b. Indicate the process that emits the air pollutant for which operations will be limited. (In some instances, you will list the same process more than once in order to indicate the need for limits on more than one pollutant.

2c. Indicate the pollutant that is being emitted.

2d. List the limitation type as follows:

1. Emission Limit - restriction on the amount of a pollutant which may be emitted from a process expressed in mass per unit time or per unit production level (ie, lbs/hr, lbs/MMBtu, lbs/lb product,...)
2. Operational Limits
   a. restrictions on the amount of product that can be manufactured or otherwise produced by the process.
   b. restrictions on raw material input to the process.
   c. restrictions on the manner in which a process is operated, including type or amount of material combusted, stored, or processed.
   d. restrictions on the type and quantity of fuel combusted.
   e. conditions which specify that the source must install and maintain air pollution control devices that operate at a specified emission rate or efficiency.
   f. restriction on the number of hours the process can operate.
   g. other (attach detailed explanation).

Note: Enter the number and letter corresponding to the type of limits to be adopted in the FEDOOP air permit.
For example: 1. 2a, 2b, and so on. (Indicate all that apply and attack a detailed explanation of the exact limitations.)

2e. List the potential emission rate of the pollutant from the process with the permit limitation in place.

2f. Enter the suggested compliance strategy to be used to ensure compliance with all permit limits and thereby make them practically enforceable. When permits contain operational limits, you will be required to keep records that allow the District to verify compliance with its limits. When permits require control equipment to achieve minor source status, the operating parameters and assumptions used to determine the control efficiency and emission rate must also be monitored through recordkeeping or testing.

AIR POLLUTION CONTROL DISTRICT OF JEFFERSON COUNTY
850 Barret Avenue
Louisville, KY 40204-1745

FEDOOP Application

Section 1 - General Information

1. COMPANY NAME: | 2. PLANT NAME:

3. PLANT LOCATION Street _____
City _____ County _____

4. CONTACT **A** (PLANT CONTACT)
Name _____ Title _____
Telephone _____ Fax _____
E-Mail _____

5. CONTACT **B**
Name _____ Title _____
Telephone _____ Fax _____
E-Mail _____

6. CONTACT **C**
Name _____ Title _____
Telephone _____ Fax _____
E-Mail _____

7. CONTACT **D**
Name _____ Title _____
Telephone _____ Fax _____
E-Mail _____

8. MAILING ADDRESS **1**
Company Name/Dept _____
Street/P.O. Box _____
City _____ State _____ Zip _____

9. MAILING ADDRESS **2**
Company Name/Dept _____
Street/P.O. Box _____
City _____ State _____ Zip _____

10. MAILING ADDRESS **3**
Company Name/Dept _____
Street/P.O. Box _____
City _____ State _____ Zip _____

11. PLANT SIC CODE: | OR NAICS CODE:

Revised 4/23/2001
Form Set 9460

Section 1 - General Information (Continued)

12. **MAILING INFORMATION** Using the contact and mailing address information given on Page 1 of this section, identify the contact person and the mailing address for the following correspondence. Only denote one contact and address per correspondence type.

CORRESPONDENCE RELATING TO:	CONTACT (A,B,C, or D)	ADDRESS (1,2, or 3)
Permit applications (blank forms, requests for additional information, etc.)		
Permits (granted permits, permit amendments, etc.)		
Enforcement actions (non-compliance letters, notices of violations, etc.)		
Surveys, questionnaires (emission inventories, etc.)		
Fees (fee manuals, fee forms. audit notices, etc.)		
Monitoring (CEM certification applications, requests for monitoring/testing information)		
Facility (mail that must reach the plant site)		

13. LIST ALL PERMITS ISSUED TO THIS FACILITY:

Permit Number	Effective Date	Permit Number	Effective Date

14. SIGNATURE OF RESPONSIBLE OFFICIAL

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete.

Signature: _____

Name: _____

Title: _____

Date: _____

15. CHECK POLLUTANTS FOR WHICH EMISSION LIMITS ARE REQUESTED THROUGH THE SUBMITTAL OF THIS APPLICATION

- Particulate Matter (PM) ____
- Sulfur Dioxide (SO_2) ____
- Oxides of Nitrogen (NOx) ____
- Carbon Monoxide (CO) ____
- Lead (Pb) ____
- Volatile Organic Compounds (VOCs) ____
- Hazardous Air Pollutants (HAPs) ____
- Other: _____

Section 2 – Proposed Limits in the Air Permit

1. COMPANY NAME:

2. COMPLETE THE FOLLOWING TABLE.

(a) Air Permit #	(b) Process Name	(c) Pollutant Type	(d) Limitation Type		(e) Potential Emissions with Limitations[1] (tons/year)	(f) Compliance Strategy[2]
			Emission Limit	Operational Limit		

[1]Include all calculations from which the emissions were determined.

[2]Attach additional pages if necessary.

SECTION 112(R) RISK MANAGEMENT PLAN
FORM 9460-P

Under Section 112(r) of the Clean Air Act Ammendments of 1990, any source that manufactures, processes, uses, stores, or otherwise handles regulated substances listed in 40 CFR 68 Subpart C in quantities that exceed a specified threshold to develop and implement a Risk Management Plan (RMP) pursuant to 40 CFR 68 Subpart B. The following questions must be answered and made part of your permit application submittal to the District.

Are you required to register a RMP pursuant to 40 CFR 68 Subpart B?

❑ YES ❑ NO

If you are required to submit a RMP, have you submitted it to the implementing agency?

❑ YES ❑ NO

If so, indicate the submittal date below.

/ /

If not, please provide the anticipated submittal date and a brief explanation as to why the submittal has not been made.

Anticipated Submittal Date: | / / |

_____

_____

Has the RMP submittal been reviewed?

❑ YES ❑ NO

Were any changes suggested?

❑ YES ❑ NO

Have the suggested changes (if any) been made to the RMP?

❑ YES ❑ NO

If the answer is no, please provide a brief summary of what was identified as requiring changes.

_____

_____

_____